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(71)Applicant : DAINIPPON PRINTING CO LTD

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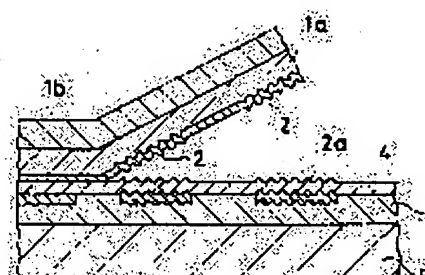
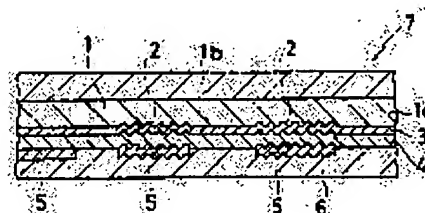
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(54) SHAPING FILM

(57)Abstract:

PURPOSE: To manufacture a film of superior heat resistance and emboss easily recessed and projected patterns by means of the emboss method by adding thermoplastic resin with polyester, biaxially orienting and providing given tensile strength.

CONSTITUTION: A biaxially oriented polyester film has tensile strength of 2-5kg/mm² at the time of 100°C and 100% orientation. The composition of said film is mainly of polyethylene-terephthalate, a different kind saturated polyester component having a structure to be able to form nonlinear copolymer molecules and polyester in the form of a copolymer. When said shaping film is used as a base 1a of a transfer sheet 7, recessed and projected patterns 2 are provided on the base 1a by the emboss method, and a release layer 3 is provided on the pattern formed surface side, on which a peel ply 4 is laminated. Further, printing patterns 5 are provided in the positions to synchronize with the recessed and projected patterns 2 of the base 1a on said surface, on which a bonding agent layer 6 is laminated to constitute a transfer sheet 7.



DERWENT-ACC-NO: 1990-062367

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TITLE: Polyester film for moulding and embossing - produced by
copolymerising polyethylene-terephthalate with unsatd.
polyester

PATENT-ASSIGNEE: DAINIPPON PRINTING CO LTD[NIPQ]

PRIORITY-DATA: 1988JP-0164240 (July 1, 1988)

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APPLICATION-DATA:

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ABSTRACTED-PUB-NO: JP 02014111A

BASIC-ABSTRACT:

A bi-axially oriented polyester moulding film has a tensile stress at 100% elongation of 2-5 kg/sq.mm by measurement at 100 deg.C. As independently claimed, a biaxially oriented polyester moulding film is made with a polyester. The polyester is produced by copolymerising a polyethylene terephthalate major constituent with an unsatd. polyester constituent of different type from the polyethylene terephthalate. The unsatd. polyester constituent has a molecular stereo-structure which produces non-linear chain polymeric molecules for redn. of crystallinity. As independently claimed, a moulding film comprises the above polyester film and a generally-used polyester film made with a polyethylene terephthalate resin, having a draw ratio of 3-5, laminated together.

The unsatd. polyester constituent may be an acrylic resin, polybutylene terephthalate, poly(1,4-cyclohexylenedimethyleneterephthalate), etc..

USE/ADVANTAGE - For embossing to form convex and concave patterns. The patterns may be easily formed without breaking of the patterns and curling of the films. The film has a high heat resistance, and is suitable for use by in-moulding at high temps..

TITLE-TERMS: POLYESTER FILM MOULD EMBOSS PRODUCE COPOLYMERISE POLYETHYLENE TEREPHTHALATE UNSATURATED POLYESTER